## REMARKS

The Official Action of November 30, 2006 is not entirely clear as to the status of the claims. After correctly noting on the Form PTO-326 that claims 1-32 are pending in the application, the first paragraph of the Action indicates that claims 1-15 are pending in the application and are presented to be examined upon their merits. However, Applicant's Response to Official Action of April 21, 2006 added new claims 28-32 to the application such that the Form PTO-326 is correct in that claims 1-32 have been presented for examination on their merits. Further, the November 30, 2006 Action does not affirmatively reject any claims under 35 U.S.C. 101 as being directed to non-statutory subject matter. Nevertheless, because the topic is addressed at length under the heading "Regarding the §101 rejection" at the middle of page 2, Applicant will proceed in this Response as if all of claims 1-32 were rejected under §101. Another bit of uncertainty results from the rejection of claims 1-27 as being unpatentable over the cited Reilly publication "Investment Analysis and Portfolio Management ("Reilly") in the previous Official Action (mailed April 21, 2006), while the November 30, 2006 Action indicates only that claims 28-32 were rejected under §103 (without indicating whether the prior §103 rejection of claims 1-27 was withdrawn and/or without renewing that rejection). Applicant is therefore uncertain as to whether claims 1-27 were rejected under §103 in the November 30, 2006 Action, but in light of the paragraphs under the heading "Regarding the §103 rejection" at the middle of page 3 of the Action, this Response will proceed as if those claims, like new claims 27-32, were again rejected under §103.

On the assumption that all of claims 1-32 were rejected under §101 and that all of claims 1-32 were rejected under §103, Applicant respectfully traverses both rejections. In accordance with the requirements of 37 C.F.R. §§1.111(b) and 1.119, Applicant submits the following comments to distinctly and specifically point out the unsupported nature of these rejections.

In response to the rejection of claims 1-32 under 35 U.S.C. 101, independent claims 1, 7, and 25 have all been amended to recite that Applicant's claimed invention is implemented by computer. It is respectfully submitted that this amendment should overcome the rejection of those independent claims, and the other claims dependent thereon, under §101, and reconsideration and withdrawal of this §101 rejection is respectfully requested in light of this amendment. Please note that original claim 22, dependent on claim 7, recited that the method of claim 7 was performed by computer and that original claim 23 was directed to a computer having a program for performing the method of claim 22 encoded in its memory. It is respectfully suggested (in light of the comments set out in the Official Action of November 30, 2006 as to how the claimed method, when given a broad interpretation, can be performed with paper and pencil such that they do not meet the requirements of §101) that claims 22 and 23, which recited

the use of a computer as originally presented, should not have been rejected under §101 in the first place.<sup>1</sup>

The §103 rejection of claims 1-27 that is presumed (see the first paragraph of these "Remarks") to have been made in the November 30, 2006 Official Action over Reilly, F.K., "Investment Analysis and Portfolio Management" 3<sup>rd</sup> Ed., the Dryden Press, Copyright 1989, pp. 165-170, is again traversed for failure to establish a *prima facie* showing of the obviousness of the differences between the claimed invention and Reilly. As set out in Applicant's Response to Official Action of April 21, 2006, MPEP §2143 requires that three criteria be met to establish a *prima facie* case of obviousness: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success (... that the combination will be an effective improvement); and (3) that the prior art references, when combined, must teach or suggest all the claim limitations. For the following reasons, it is respectfully submitted that the Official Action of November 30, 2006 fails to establish even one of these three required elements as a basis for a proper *prima facie* §103 rejection. Considering first whether Reilly teaches or suggests the claim elements,

The first subparagraph of Applicant's claim 1 recites "obtaining a current index of each of the stock, bond, and money market sectors of the marketplace in a country" and, as previously argued by Applicant, Reilly does not disclose this step of Applicant's method. Applicant specifically traverses the allegation in the carryover sentence between pages 3-4 of the Action that "Reilly provides a comprehensive list of combined market sector indexes which comprehensively measure the total return of securities in international sectors" because Reilly includes no such disclosure. The Salomon Brothers International Bond and Money Market Performance Indexes described on page 165 of Reilly might measure returns on international sectors of the bond and money markets, and the FT-Actuaries World Indices described on page 166 of Reilly might measure certain equity securities, but they do not "comprehensively measure the total return of securities in international sectors [emphasis added]" as alleged since each is a separate index focusing on its respective component of the total market. Further, claim 1 refers to the "marketplace in a country," not "international sectors," such that one might question the relevance of this alleged disclosure to Applicant's claim 1 in the first place.

The second element of claim 1 recites "computing a weighting factor for each said index," and although there is mention of a "market value-weighted and unweighted composite world bond index and money market index" near the middle of page 165 of

<sup>&</sup>lt;sup>1</sup> Applicant notes also that the present invention necessarily utilizes computers and telecommunication equipment. Applicant's invention involves accessing data describing the stocks, bonds and money market securities of the market place, arranging the securities into an index, computing weighting factors, and calculating a capital market index. The sheer volume of the data for the securities that provide an accurate representation of the marketplace renders manual access of this data an impossibly long and tedious task. Because all this data is available in digital form, a manual approach would require a computer to access the data and a printer to transform it into hard copy that could be read and utilized manually. The time required to perform this task, combined with the time required to do the manual calculations and manipulations comprising the index formation part of the claimed method, might take years. By the time the first index was calculated, the result would be so out of date as to be useless.

Reilly, there is no further disclosure or description of weighting of these indexes. Applicant also notes the description on page 166 of Reilly of how the FT-Actuaries World Indices of equities "are market value-weighted arithmetic averages of the price relatives of the constituents [emphasis in original]," but a review of the second sentence of that same paragraph, stating that the FT-Actuaries World Indices measures approximately 2500 equity securities "in 24 countries" makes it clear that the weighting described in this sentence is not, as recited in the second element of Applicant's claim 1, being computed for each said index.

The third element of Applicant's claim 1 recites that "each said weighting factor [is applied] to each said index to compute weighted indexes for each of the stock, bond, and money market sectors," and although Applicant reserves the opportunity to contest the matter at a later date if the need arises, Applicant will concede for the purposes of argument (without so admitting) that Reilly discloses this step of claim 1.

The fourth element of Applicants claim 1 recites "calculating a capital market index within the country by combining said weighted indexes," and Applicant is unable to find even a hint that the FT-Actuaries World Indices and the Solomon Brothers International Bond and Money Market Performance Indexes described in Reilly are being combined or should be combined.

In short, none of the first, second, or fourth elements of Applicant's claim 1 are described in Reilly. Consequently, the Action does not establish that the cited reference teaches all the elements of the invention claimed in claim 1.

When a similar exercise is undertaken for independent claim 7, it can be seen that Reilly fails to disclose all the elements of that claim:

The first three elements of claim 7 recite "determining a stock index for a country," "determining a bond index for the country," and "determining a money market index for the country;" "computing a weighting factor for each said index," and "applying said weighting factor to each said index to compute corresponding weighted indexes," and although Applicant reserves the opportunity to contest the matter at a later date if the need arises, Applicant will concede for the purposes of argument (without so admitting) that Reilly discloses these steps of claim 7.

However, the last element of claim 7, "calculating a capital market index for the country by combining said weighted indexes" is not taught in Reilly. As set out above, there is no hint in Reilly that the FT-Actuaries World Indices, the Solomon Brothers International Bond and Money Market Performance Indexes, or any of the other indices described in that reference should be or are being combined, and there is certainly no indication in that reference that "weighted indexes" should be combined as recited in claim 7.

Consequently, the Action does not establish that the cited reference teaches all the elements of the invention claimed in claim 7.

Similarly, the Action does not establish that the cited reference teaches all the elements of the invention claimed in independent claim 25. That claim (as amended) recites

11

"computing an index and market value of said index in each included country" in its first paragraph. Although Applicant reserves the opportunity to contest the matter at a later date if the need arises, Applicant will concede for the purposes of argument (without so admitting) that Reilly discloses this step of claim 25.

The second element of claim 25 recites "determining a currency value of each said included country," and there is no disclosure in Reilly of this step whatsoever. The Solomon Brothers International Bond and Money Market Performance Indexes described on page 165 of Reilly is a "market value-weighted . . . money market index," which is clearly not "the currency value" as recited in this second element of claim 25.

There is no disclosure or suggestion whatsoever in Reilly of "computing a multicountry market summation by summing the multiplication of the index, the market value, and the currency value of each said country" as recited in the third element of claim 25. As set out above, Reilly does not even hint at combining at all, and therefore cannot disclose or teach combining an index, market value, and/or currency value, and certainly cannot teach a specific way to combine as recited in this third element of claim 25.

The fourth element of claim 25 recites "computing a divisor by summing the multiplication of the market value and currency value of each said country," and because Reilly does not teach multiplying the market and currency value for each country, it cannot teach summing the multiplication of those values as recited in this element of the claim. Note also that there is no disclosure of a divisor in Reilly.

Because there is no disclosure of a multi-country market summation or a divisor in Reilly, there cannot be a disclosure of the step of "dividing said multi-country market summation by said divisor" as recited in the last element of claim 25.

In the absence of any disclosure in Reilly of the second, third, fourth, or fifth elements of Applicant's claim 25, it is clear that the November 30, 2006 Action falls short of establishing that all of the elements recited in the claim are disclosed in the prior art. For this reason, and just as is the case for independent claims 1 and 7, the Action fails to establish the first of the three required elements of a proper *prima facie* showing of the obviousness of claim 25.

Not only does Reilly not disclose all the elements of independent claims 1, 7, and 25, but MPEP §2143 requires that there be some suggestion or motivation, either in the references themselves or in knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings to establish a *prima facie* case of obviousness. The only suggestion or motivation to combine or modify set out in the November 30 Official Action is set out in the allegation (referring to page 4 of the Action, about one-third of the way down the page) that diversifying a portfolio is a normal business practice for mitigating risk. However, this alleged suggestion or motivation, even if true (and Applicant does take issue with this allegation as set out in the next paragraph), does not provide the many elements of claims 1, 7, and 25 that are listed above as not having been disclosed in Reilly such that it is respectfully urged that the Action fails to establish this second required element of a proper *prima facie* showing.

Further, even if it is assumed for the purposes of argument that diversification is suggested and/or known in the art, Applicant will concede only that (quoting from the middle of page 4 of the Action) "diversifying a portfolio is a well known concept which allows risk to be mitigated over a broad field of investment [emphasis added]." In other words, although diversification may be suggested and/or known for the purposes of managing a portfolio (by

SCHC,002: 11-30-06 ROA 12

mitigating risk), Applicant does not admit that diversification is suggested and/or known in the art for the purpose of closely replicating a "market portfolio" (not an investment portfolio) that "accounts for all sectors of the economy and thus, provides indexes that more accurately reflect the marketplace" (quoting from lines 16-17 of page 2 of the specification of the captioned application). Stated another way, Applicant's invention was not motivated by, and addresses a different problem, than the problem of mitigating risk in an investment portfolio. One of the problems addressed by Applicant's invention is the problem of providing an index that is an accurate representation of the marketplace, and Applicant's methods address that problem by accounting "for the grouping of different types of financial market instruments" (quoting from line 20 of page 2 of the specification) by measuring (quoting from lines 23-24 of page 2) "the entire marketplace to account for capital being redirected between classes of assets [where the phrase "classes of assets" refers to the equity, bond, and money market sectors of the marketplace]." Complete and accurate characterization of the entire marketplace by inclusion of multiple classes of assets is a very different problem than mitigating risk in managing a portfolio, and Applicant therefore respectfully traverses the allegation in the Action that diversification is suggested and/or known in the art. Note also that even if it is possible to stretch the allegation that diversification is suggested and/or known in the art far enough to address the problem that Applicant's invention solves, the Action does not indicate that there is any teaching in the art as to how to achieve that diversification. Applicant's claims 8-16 and 28-29 are all directed to the manner in which Applicant's methods are implemented, reciting specific components of the marketplace and how to combine them in a way that is not taught in the art (and indeed, no indication is given anywhere in the Action that the art suggests such specifics). It is therefore respectfully urged that at least claims 8-16 and 28-29, reciting the manner in which Applicant's invention provides an accurate representation of the marketplace, are allowable, and that the §103 rejection of those claims should be reconsidered and withdrawn. Note also that Applicant's claim 25, being directed to a "multi-country" index, makes no reference to diversification. Consequently, the allegation that diversification is suggested and/or known in the art set out in the Action appears to be irrelevant and/or inapplicable to that claim such that reconsideration and withdrawal of the §103 rejection of claim 25 is also appropriate.

In addition to the disclosure of all the claim elements and the suggestion to combine and/or modify, MPEP §2143 also requires a third criterion if a *prima facie* case of obviousness to be established, namely there must be a reasonable expectation of success that the combination asserted in the Action will be an effective improvement. Applicant is unable to find so much as an attempt to establish this third required showing of a proper *prima facie* obviousness rejection in the November 30, 2006 Action.

13

SCHC,002: 11-30-06 ROA

Applicant therefore respectfully traverses the §103 rejection of claims 1-27 (and, if it was intended to reject claims 28-32 for this same reason, a matter addressed below) because the Action (paraphrasing from MPEP §2143) fails to establish a suggestion or motivation, either in the reference(s) itself or in the knowledge generally available to one of ordinary skill in the art to modify the reference(s) or to combine reference teachings, fails to establish a reasonable expectation of success (... that the combination will be an effective improvement), and fails to establish that the prior art reference(s), when combined, teaches or suggests all the claim limitations. For these reasons, reconsideration and withdrawal of the §103 rejection of claims 1-27 (and also claims 28-32 if it was intended to reject those claims under §103) is respectfully requested.

Turning now to the rejection of claims 28-32 under §103 over Reilly, the Action states (at the top of page 5) that the April 13, 2006 Action sets out the basis for the rejection of these claims. Applicant presumes that page 5 of the November 30, 2006 Action intended to refer to the Official Action mailed in this application on April 21, 2006, but even if Applicant's presumption is accurate, claims 28-32 were not added to the captioned application until Applicant responded to the April 21, 2006 Action such that the April 21, 2006 Action could not set out the reasons for rejecting claims 28-32. Applicant therefore traverses this rejection as being clearly improper and requests reconsideration and withdrawal of the rejection. Applicant also notes the improper nature of the rejection of claims 28-32 in the Official Action of November 30, 2006 for another reason. Specifically, in responding to the Official Action of April 21, 2006, and in this Response, Applicant attacked the *prima facie* showing of the obviousness of claims 1-27, submitting arguments showing that the rejection of those claims failed to establish the three elements required by MPEP §2143. As set out in *In re Oetiker* (24 U.S.P.Q.2d 1443 (Fed. Cir. 1992))

"[a]fter evidence or argument is submitted by the applicant in response [to a prima facie rejection], patentability is determined on the totality of the record, by a preponderance of the evidence with due consideration to persuasiveness of argument."

Instead of responding to Applicant's arguments as to how the Office failed to establish a proper prima facie obviousness rejection, the Official Action of November 30, 2006 simply refers back to the same allegations set out in the April 21, 2006 Action, thereby erecting the proverbial "stone wall" that Applicant cannot possibly hurdle so long as this same rejection is repeated in successive office actions. However, as also set out in the Oetiker decision,

"if examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent."

Because the Office did not come forward with additional evidence to "re-establish" a prima facie showing of the unpatentability of Applicant's claims after Applicant submitted arguments

SCHC,002: 11-30-06 ROA 14

attacking the §103 rejection, "without more" Applicant is entitled to the grant of a patent. It is therefore respectfully requested that the §103 rejection of claims 1-27, and claims 28-32, be reconsidered and withdrawn.

Entry of the above amendments to the claims, consideration of the remarks set out herein, allowance of the claims, and passage of the application to issuance are all respectfully requested. In the unforeseen event that there are questions and/or issues yet to be answered in this application, it is respectfully requested that Applicant's Attorney be contacted at the address and phone number set out below.

Respectfully submitted,

Mark R. Wisner

Registration No. 30,603

1177 West Loop South, Suite 400

Houston, Texas 77027-9012 Telephone: (713) 785-0555 Facsimile: (713) 785-0561

ATTORNEY FOR APPLICANT(S)

Date: February 28, 2007